

Silicon NPN Power Transistors

2SC2258

DESCRIPTION

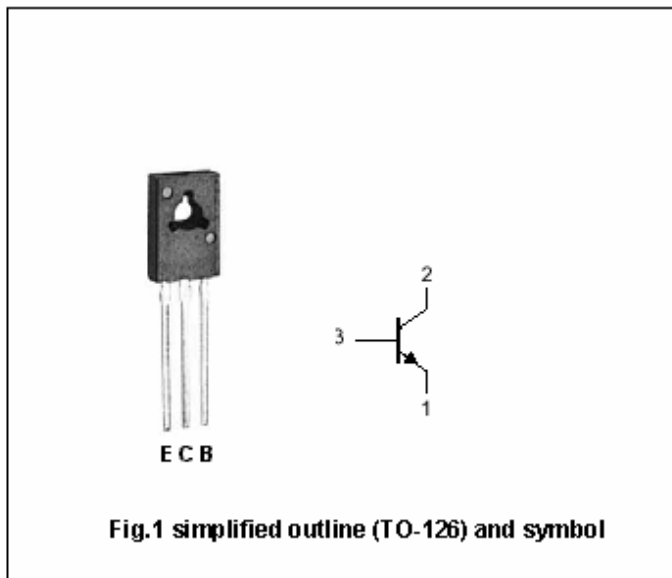
- With TO-126 package
- High transition frequency f_T
- High collector-emitter voltage V_{CEO}

APPLICATIONS

- For high breakdown voltage general amplification
- For video output amplification

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector;connected to mounting base
3	Base



Absolute maximum ratings($T_a=25^\circ$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	250	V
V_{CEO}	Collector- emitter voltage	Open base	250	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		0.1	A
I_{CM}	Collector current-peak		0.15	A
P_C	Collector power dissipation	$T_C=25^\circ$	1.2 ^{*1}	W
			4 ^{*2}	
T_j	Junction temperature		150	$^\circ$
T_{stg}	Storage temperature		-55 $^\circ$ +150	$^\circ$

Note :*1: Without heat sink

*2: With a 100 × 100 × 2 mm A1 heat sink

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
I _{CER}	Collector cutoff current	V _{CE} =250V;R _{BE} =100kΩ			100	μA
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =0.1mA ;I _C =0	7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =50mA ;I _B =5m A			1.2	V
V _{BE}	Base-emitter voltage	I _C =40mA ; V _{CE} =20V			1.2	V
h _{FE-1}	DC current gain	I _C =40mA ; V _{CE} =20V	40			
h _{FE-2}	DC current gain	I _C =5mA ; V _{CE} =50V	30			
C _{OB}	Output capacitance	I _E =0; V _{CB} =50V;f=1MHz		3	4.5	pF
f _T	Transition frequency	I _E =-10mA ; V _{CB} =10V,f=200MHz		100		MHz

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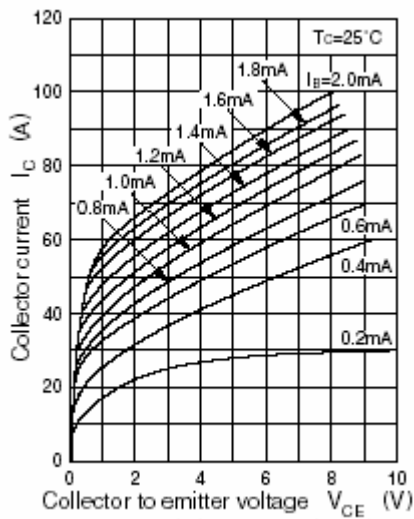


Fig.3 Static Characteristic

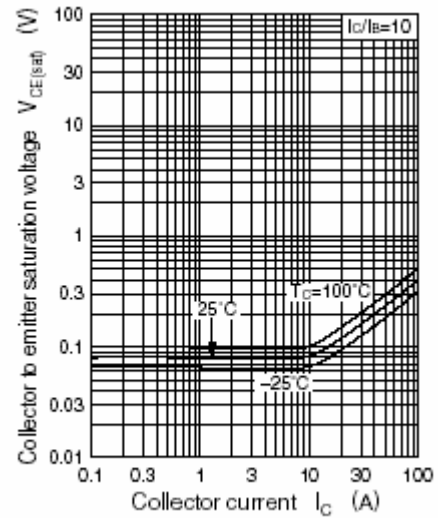


Fig.4 Collector-Emitter Saturation Voltage

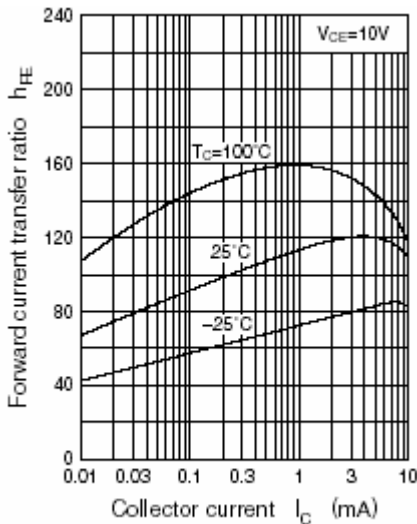


Fig.5 DC current Gain

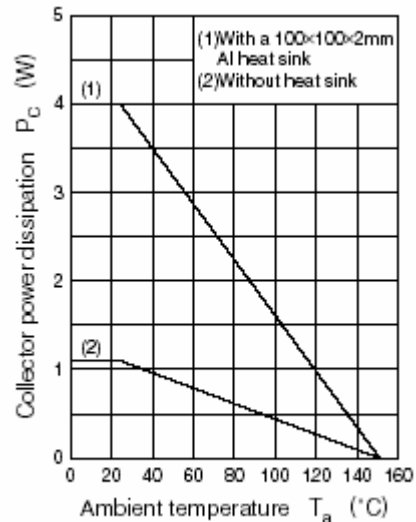


Fig.6 Power Derating